

RIDDLE  
PRE-CALCULUS  
LIMITS REVIEW

NAME \_\_\_\_\_

MATCH THE FOLLOWING LIMITS AND SOLUTIONS TO DECODE THE SECRET MESSAGE.

\_\_\_\_\_ 1.  $\lim_{x \rightarrow \infty} \frac{6-7x}{x+3}$

\_\_\_\_\_ 2.  $\lim_{x \rightarrow 5} 4$

\_\_\_\_\_ 3.  $\lim_{x \rightarrow 1} \frac{x^2-1}{x-1}$

\_\_\_\_\_ 4.  $\lim_{x \rightarrow 0} \frac{x^2+3x}{x}$

\_\_\_\_\_ 5.  $\lim_{x \rightarrow 3} \frac{x^3+27}{x+3}$

\_\_\_\_\_ 6.  $\lim_{x \rightarrow a} \frac{3}{x}$

\_\_\_\_\_ 7.  $\lim_{x \rightarrow \infty} \frac{1}{x}$

\_\_\_\_\_ 8.  $\lim_{x \rightarrow 0} \frac{4}{x^2}$

\_\_\_\_\_ 9.  $\lim_{x \rightarrow \infty} -6 - \frac{3}{x^2}$

\_\_\_\_\_ 10.  $\lim_{x \rightarrow 0} \frac{8x-8}{x-1}$

\_\_\_\_\_ 11.  $\lim_{h \rightarrow 0} \frac{f(x+h)-f(x)}{h}$ , if  $f(x) = 2x^2$

\_\_\_\_\_ 12.  $\lim_{x \rightarrow \infty} \frac{7x-7}{x-1}$

$$\underline{\hspace{2cm}} \quad 13. \lim_{x \rightarrow -3} \frac{x^3 + 27}{x + 3}$$

$$\underline{\hspace{2cm}} \quad 14. \lim_{x \rightarrow 1} \frac{5x - 5}{x - 1}$$

$$\underline{\hspace{2cm}} \quad 15. \lim_{x \rightarrow 1} \frac{5x^2 + x}{x}$$

$$\underline{\hspace{2cm}} \quad 16. \lim_{x \rightarrow -1} (-2x^2 + 5x - 2)$$

$$\underline{\hspace{2cm}} \quad 17. \lim_{x \rightarrow -4} \frac{3x^2 + 13x + 4}{x + 4}$$

9

15

6

12

13

16

1

2

8

3

4

10

2

8

17

4

10

11

2

8

5

14

7

4x	and
$\frac{3}{a}$	be
-11	watch
-9	three
-7	groups
-6	people
-1	watches
0	happened
2	make
3	things
4	those
5	what
6	can
7	divided
8	happen
9	wonder
27	into
35	why
$\infty$	who
none of these	where